## Glossary

**Analyze:** To study something by breaking it down into simpler parts.

**Bob:** A weight at the end of a line or rod; for example, the weight at the end of a pendulum.

**Calendar:** A device or system used to keep track of the passage of time.

**Calibrate:** To put marks on a scale, container, or other device so that any measurements taken using it will be accurate and consistent.

**Cause:** Something that produces an effect.

**Classify:** To group two or more things together because they share one or more properties.

**Conclusion:** A decision that is based on observations or on a study of data.

**Constant:** A condition in a controlled experiment that is not changed.

**Controlled experiment:** A scientific investigation in which one variable is changed and all the others are kept the same, or constant.

**Data:** Information, such as that gathered during an experiment.

**Eclipse:** The complete or partial hiding of one body in the sky as it passes into the shadow of another. For example, an eclipse occurs when the moon passes between the sun and the earth, or when the moon enters the shadow of the earth.

**Effect:** Something brought about by a cause: a result.

**Escapement:** A mechanism that controls wheel movement and balance in a clock or timepiece.

**Experiment:** A procedure that is carried out to investigate a scientific question.

**Frequency:** The number of times a certain process, such as the back-and-forth swing of a pendulum, occurs in a given period of time.

**Gnomon:** An object that, by the length or position of its shadow, tells the time of day.

**Hypothesis:** A prediction about how something works or how two variables are related.

**Infer:** To draw a conclusion about a specific event based on observations and data.

**Invent:** To think up or create something for the first time.

Metronome: A device that marks precise intervals of time by clicking.

**Opinion:** An expression of how one feels or thinks about something. An opinion is based on personal views, not necessarily on facts.

Pattern: A repeating arrangement of shapes, colors, numbers, or other things.

**Pendulum:** A body that is suspended by a string or wire from a fixed point and that can swing back and forth.

**Phase:** A stage in a process. The apparent shape of the moon at any time is an example of a phase.

**Property:** Something about an object that helps identify it.

**Result:** Effect; something produced by a cause.

Troubleshoot: To observe and test a device to see why it is not working.

Variable: An element in an experiment that can be changed.

Weight: A measurement of the force of gravity on an object.

**Zenith:** The highest point; in astronomy, the point that is directly overhead in the sky.